

REMARKS

Claims 1, 3, 5-7 and 9-13 remain herein. Claims 14-17 have been added. No new matter has been added.

Applicants believe the following amendments place the claims in condition for allowance, and surely in better condition for appeal.

1. Claims 1-3, 5-7 and 9-13 were rejected under 35 U.S.C. § 103(a) over Menier et al. U.S. Patent 5,493,264 and Howell U.S. Patent 4,168,514. Menier describes a device that protects against current surges. It is connected to a switch with only two ohmic resistances, high when the switch is open and low when the switch is closed, and it is tripped by external controls. The Office Action admits that Menier fails to disclose an electrical ignition means connected so that when the mobile electrode is in the operating position, the electrical ignition means is connected to the arc switching electrode on the one hand and to the first or second connecting pads on the other hand, and that when the mobile electrode is in the switching position and an electric arc is drawn between the first connecting electrode and the second connecting electrode, the electrical ignition means is disconnected from the circuit, the electrical ignition means having an ohmic resistance varying inversely with the voltage applied to the electrical ignition means, the ohmic resistance being high when the voltage is lower than an ignition voltage and decreasing when the voltage increases above the ignition voltage.

Menier further fails to recite the electrical ignition means connected in series between the arc switching electrode and the second connecting pad, as recited in applicants' claim 1.

Howell does not supply what Menier lacks. Howell discloses a varistor in parallel with a circuit breaker, the circuit breaker in series with an electrical line and load. Howell fails to disclose fails to disclose an electrical ignition means connected so that when the mobile electrode is in the operating position, the electrical ignition means is connected to the arc switching electrode on the one hand and to the first or second connecting pads on the other hand, and that when the mobile electrode is in the switching position and an electric arc is drawn between the first connecting electrode and the second connecting electrode, the electrical ignition means is disconnected from the circuit, the electrical ignition means having an ohmic resistance varying inversely with the voltage applied to the electrical ignition means, the ohmic resistance being high when the voltage is lower than an ignition voltage and decreasing when the voltage increases above the ignition voltage.

Howell further fails to disclose the electrical ignition means connected in series between the arc switching electrode and the second connecting pad, as recited in applicants' claim 1. Thus, neither Menier nor Howell, alone or combined, discloses every element of applicants' claim 1.

Nor would it be obvious to one of ordinary skill in the art to combine Menier and Howell to render applicants' claim 1 obvious. Menier discloses a method for protecting against electric current surges only, and connects a physical control device between a coil contact and a stationary contact. On the other side of the stationary contact is a mobile electrode. Thus, Menier differs from applicants' invention in both purpose and structure.

Howell discloses an apparatus comprising a circuit breaker between a line and a load, and a variable resistor between the circuit breaker and the load, and between the load and ground.

Although the device protects against overcurrents and overvoltages, it cannot protect against long follow current waves. Rather, the lightning arrestor acts as a fail-safe only after the variable resistor fails. *See Howell*, col. 2, lines 26-43. The lightning arrestor of applicants' invention, on the other hand, protects the electrical ignition means from even long overcurrents by directing the current away from the electrical ignition means during an overcurrent. Thus, Howell differs from applicants' invention in both purpose-protecting the electrical ignition means-and structure.


Further, there is no teaching in either Menier or Howell that would motivate one of ordinary skill in the art to combine Menier, Howell, or any other prior art of record, to render applicants' claims 1-3, 5-7 and 9-13 obvious. Since Menier and Howell combined fail to disclose every element of applicants' claim 1, and since one of ordinary skill in the art would not combine Menier and Howell to render applicants' claim 1 obvious, Menier and Howell are improper grounds for rejection of claims 1-3, 5-7 and 9-13 under 35 U.S.C. § 103(a). Reconsideration and withdrawal of the rejection are respectfully requested.

For all of the foregoing reasons, claims 1-3, 5-7 and 9-17 are now fully in condition for allowance, which is respectfully requested. The PTO is hereby authorized to charge or credit any necessary fees to Deposit Account No. 19-4293. Should the Examiner deem that any further amendments would be desirable in placing this application in even better condition for issue, he is invited to telephone applicants' undersigned representative.

Respectfully submitted,

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Date: October 9, 2007



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